

REMARKS

Claims 1 to 24 are currently pending in the application. Claims 1 to 24 are rejected. Claims 16 and 18 have been amended. All of the amendments find full support in the specification and drawings as filed. No new matter has been added. In view of the above amendments and the following remarks, Applicants respectfully submit that this application is in condition for allowance. Accordingly, reconsideration and a timely indication of allowance are therefore respectfully requested.

Rejection Of Claims 16 And 18 Under 35 U.S.C. § 112

As an initial matter, the Examiner rejected claims 16 and 18 under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. With regard to claim 16, the Examiner states that it is unclear whether the circumferential lid flange as recited in line 2 is the same as the circumferential horizontal lid flange recited in line 5. Additionally, the Examiner states that it does not appear that the interior surface of the lid has the flange, but rather that the flange appears to be on the exterior surface.

Applicants have amended claim 16 to clarify that the circumferential lid flange recited in line 2 is a horizontal lid flange. This provides antecedent basis for the phrase "circumferential horizontal lid flange" in line 5. Applicants respectfully disagree with the Examiner's characterization of the flange as being on the exterior surface of the lid. As shown in FIG. 7A, and explained on page 7, lines 24 to 29 of the

specification, the horizontal lid flange 38 is sized and dimensioned to match with the circumferential rim 30 of the container. When the lid is mated to the container, the horizontal lid flange 38 is not visible and therefore is on an interior surface of the lid.

With regard to claim 18, the Examiner states that the planar support members do not appear to be horizontal in the drawings. Applicants have removed the word "horizontal" from claim 18. The limitation of "a planar structural support" finds full support in the specification on page 10 lines 24 and 25 and in FIG. 2. In view of the amendments to claims 16 and 18, and the above remarks, Applicants respectfully request that the rejection of claims 16 and 18 under 35 U.S.C. § 112, second paragraph, be withdrawn.

Rejection Of Claims 1 And 2 Under 35 U.S.C. § 102(b)

The Examiner rejected claims 1 and 2 under 35 U.S.C. § 102(b) as allegedly being anticipated by, or in the alternative under 35 U.S.C. § 103(a) as allegedly being obvious over, U.S. Patent No. 5,092,996 to Spielberg. Applicants respectfully traverse this rejection.

Claim 1, is directed to a centrifuge labware device having a container, and a removable non-threaded lid. As explained on page 1, line 10 to page 2, line 13, sample mixtures are placed in labware containers, and the containers are placed in centrifuge buckets. Thus, the container claimed in claim 1 fits inside of a centrifuge bucket.

Spielberg is directed to a blood filtering system having a filter housing that sits on the shoulder of a cylindrical

centrifuge bucket (See Abstract and FIGS. 2, 5A to 6C).

Spielberg does not teach a container that fits inside of a cylindrical centrifuge bucket. Applicants respectfully submit that Spielberg does not teach or suggest the container of claim 1.

Additionally, Applicants submit that one skilled in the art would have no motivation to modify the design of Spielberg to add a container. As explained on page 2, lines 20 to 24 of the specification, the samples in the labware are rotated until the biological material is concentrated in a pellet at the bottom of the labware. The pellet is harvested by scraping the pellet off of the bottom of the labware. This process is made easier by the ability to remove the pellet containing labware from the centrifuge bucket. Additionally, removal of the labware from the bucket allows for cleaning of sample residue from the labware.

In Spielberg, as explained in col. 3, lines 49 to 66, blood bags 3, 21 connected to a filter 17. The filter 17 is attached to a peripheral support means 37 that sits on the top of the centrifuge bucket. Once centrifugation is complete, the filter, peripheral support means, and blood bags are removed from the centrifuge bucket. There is no need to place the blood bags in a separate container. Therefore, one skilled in the art would have no motivation to add an additional container to the system taught by Spielberg, let alone a container as taught by the present invention. Therefore, claim 1 is not obvious over Spielberg.

As detailed above, claim 1 is novel and non-obvious over Spielberg. Therefore, Applicants respectfully request that this rejection be withdrawn.

Rejection Of Claims 8, 10 And 11 Under 35 U.S.C. § 103(a)

The Examiner rejected claims 8, 10 and 11 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 5,092,996 to Spielberg. Applicants respectfully traverse this rejection.

Claims 8, 10, and 11 depend from claim 1 and by definition contain all of the limitations of claim 1. As explained above, Claim 1 is novel and non-obvious over Spielberg. Therefore, Applicants respectfully request that this rejection be withdrawn.

Rejection Of Claims 1 To 5, 8 To 12, 15, 20 And 22 To 24 Under U.S.C. § 103(a)

The Examiner rejected claims 1 to 5, 8 to 12, 15, 20 and 22 to 24 under U.S.C. § 103(a) as allegedly being unpatentable over Moore (U.S. Patent No. 5,855,289) in view of Pettersen (U.S. Patent No. 3,419,198), Southwell (U.S. Patent No. 2,849,144), Sargent-Welch Bottle Carrier S-9625, Quisenberry et al. (U.S. Patent No. 4,874,103), and Kunik (U.S. Patent No. 6,062,001). Applicants respectfully traverse this rejection.

The present invention is directed to a large mouth centrifuge labware. As explained on page 3, lines 5 and 6, the relatively narrow opening at the top of prior art labware made it difficult to remove pellets from the bottom of the labware following centrifugation. Therefore, claim 1 requires that the top opening area of the container be "at least about 90% of the interior chamber cross-sectional area." This is made possible by the fact that the lid is non-threaded, so that threads do not take away from the diameter of the top opening area.

Moore is directed to a capping and sealing assembly for a sample holding centrifuge container. As shown in FIGS. 1 and 7, a lid 34 fits over a stopper 84 and a gasket 98 and onto a container 22. As explained in col. 5, lines 37 to 65, the container tapers to an upper threaded neck portion. The neck portion is provided with increased wall thickness for increased strength. Applicants respectfully submit that the diameter of the top opening area of the container is less than about 90% of the interior chamber cross-sectional area.

Moreover, one skilled in the art would not be motivated to modify the container taught by Moore to have a top opening area of at least about 90% of the interior chamber cross-sectional area. The threaded connection necessary for attachment of the lid makes such widening of the neck top opening difficult. Additionally, the specification of Moore teaches away from such a construction by teaching a tapered neck portion with increased wall thickness for added strength. See Col. 5, lines 47 to 51. Applicants respectfully submit that Pettersen, Southwell, Sargent-Welch, Quisenberry et al. and Kunik all fail to remedy this defect of Moore.

Further, one skilled in the art would not be motivated to modify the threaded lid opening to a non-threaded design, because the lid 34 is tightened down onto the neck of the container 22 to hold a stopper 84 and a sealing device, preferably a gasket 98, in place, as shown in FIGS. 1 and 7. One skilled in the art would have no motivation to alter the threaded design of Moore for the non-threaded lid designs of Pettersen, Southwell, Sargent-Welch, Quisenberry et al. and Kunik, all of which are unrelated to centrifuge labware and the unique stresses

encountered by such labware. Therefore, Applicants respectfully request that this rejection be withdrawn as to claim 1.

Claims 2 to 5, 8 to 12, 15, 20, 22, and 23 all depend from claim 1 and by definition contain all of the limitations of claim 1. However, the additional limitations of claims 4 and 5 are also non-obvious. Claims 4 and 5 require "a hinged clip for securing the lid to the container." Applicants respectfully submit that Moore does not teach or suggest "a hinged clip for securing the lid to the container." Applicants submit that Pettersen, Southwell, Sargent-Welch, Quisenberry et al. and Kunik all fail to teach this limitation.

The additional limitations of claims 6, 7, and 9 are non-obvious. Claims 6, 7, and 9 require that the lid further comprise "a pouring spout." Applicants respectfully submit that Moore does not teach or suggest a "pouring spout." Additionally, Applicants respectfully submit that one skilled in the art would have no motivation to add a pouring spout to the lid of Moore, because the stopper 84 would render the pouring spout useless. Moreover, one skilled in the art would not be motivated to add the closable opening of Pettersen to the lid of Moore, because the flexible ribbed structure of the lid taught by Moore is substantially different than the non-centrifuge related covering cap taught by Pettersen.

The additional limitations of claim 10 are non-obvious. Claim 10 requires the interior surface of the lid further comprises "a circumferential vertical lid flange disposed interior to the circumferential horizontal lid flange." Applicants respectfully submit that the lid taught by Moore does not have "a vertical lid flange disposed interior to the

circumferential horizontal lid flange." Moreover, Applicants respectfully submit that one skilled in the art would have no motivation to alter the design of Moore to have "a vertical lid flange disposed interior to the circumferential horizontal lid flange," because of the nature of the threaded connection between the lid and receptacle.

Applicants respectfully submit that claims 2 to 5, 8 to 12, 15, 20, 22 and 23 are patentable over Moore in view of Pettersen, Southwell, Sargent-Welch, Quisenberry et al. and Kunik as explained above with regard to claim 1 as well as because of the additional limitations contained therein. Therefore, Applicants respectfully request that this rejection be withdrawn with regard to claims 2, 3, 5, 8 to 12, 15, 20, 22 and 23.

Claim 24 contains the limitations of a lid comprising "a pouring spout" and "a vertical lid flange disposed interior to the circumferential horizontal lid flange." As explained above, Moore fails to teach these limitations, and one skilled in the art would have no motivation to modify the device taught by Moore to have the claimed characteristics. Therefore, Applicants respectfully request that this rejection be withdrawn with regard to claim 24.

Rejection Of Claims 17 To 19 Under 35 U.S.C. § 103(a)

The Examiner rejected claims 17 to 19 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Moore (U.S. Patent No. 5,855,289) in view of Pettersen (U.S. Patent No. 3,419,198), Southwell (U.S. Patent No. 2,849,144), Sargent-Welch Bottle Carrier S-9625, Quisenberry et al. (U.S. Patent No. 4,874,103), and Kunik (U.S. Patent No. 6,062,001) as applied to claim 1 above

and further in view of Goldstein et al. (U.S. Patent No. 4,119,407). Applicants respectfully traverse this rejection.

Claims 17 to 19 are dependent upon claim 1. As explained above, claim 1 is patentable over Moore in view of Pettersen, Southwell, Sargent-Welch Bottle Carrier S-9265, Quisenberry et al, and Kunik. Applicants respectfully submit that Goldstein et al. also fails to remedy the defects of Moore as to claim 1. Therefore, Applicants respectfully request that this rejection be withdrawn.

Rejection Of Claim 21 Under 35 U.S.C. § 103(a)

The Examiner rejected claim 21 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Moore (U.S. Patent No. 5,855,289) in view of Pettersen (U.S. Patent No. 3,419,198), Southwell (U.S. Patent No. 2,849,144), Sargent-Welch Bottle Carrier S-9625, Quisenberry et al. (U.S. Patent No. 4,874,103), and Kunik (U.S. Patent No. 6,062,001) as applied to claim 1 above and in further view of Beardsley (U.S. Patent No. 2,191,447). Applicants respectfully traverse this rejection.

Claim 21 is dependent upon claim 1. As explained above, claim 1 is patentable over Moore in view of Pettersen, Southwell, Sargent-Welch Bottle Carrier S-9265, Quisenberry et al, and Kunik. Applicants respectfully submit that Beardsley also fails to remedy the defects of Moore as to claim 1.

The additional limitations of claim 21 are non-obvious. Claim 21 requires that the labware device further comprises "an air vent filter disposed with the lid." As explained on page 10, lines 9 to 10, the air vent filter facilitates the filling and decanting of liquid material to and from the container through a

pouring spout. As explained above, one skilled in the art would have no motivation to modify the lid of Moore to have a pouring spout, because the stopper would block liquid from reaching the pouring spout. Because one skilled in the art would have no motivation to modify Moore to have a pouring spout, there would be no need for an air vent filter. Therefore, Applicants respectfully request that this rejection be withdrawn.

Claims 13 and 14

Finally, Applicants note that the Examiner did not reject claims 13 and 14. Therefore, Applicants presume that claims 13 and 14 are in condition for allowance, subject to a possible objection that they are dependent upon a rejected base claim. In view of the above remarks regarding claim 1, Applicants respectfully submit that claims 13 and 14 are in condition for allowance. However, if the Examiner is in disagreement with the above arguments regarding claim 1, then Applicants would be amenable to amending claims 13 and 14 to render those claims independent incorporating the limitations of the base claim and any intervening claims.

Conclusion

In view of the above amendments and remarks, Applicants respectfully submit that this application is in condition for allowance. Accordingly, reconsideration and a timely indication of allowance are respectfully requested. If the Examiner believes a telephone conference would aid in the prosecution of the subject application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

The Commissioner is authorized to charge \$110.00 for a one month extension of time for a large entity. The Commissioner is also authorized to charge any other fee believed due to Deposit Account No. 19-2090.

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By



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